Province of British Columbia
Ministry of Energy, Mines
and Petroleum Resources
Hon. Anne Edwards, Minister

Mineral Resources Division
Geological Survey Branch

GEOLOGICAL SURVEY BRANCH
1992 - 93 PLAN

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TABLE OF CONTENTS

Page

1992/93 GEOLOGICAL SURVEY BRANCH PLAN 1
- Preface 1
- Mandate 1
- Key Functions 1
  - Data Collection 1
  - Data Curation and Retrieval 1
  - Data Analysis and Interpretation 1
  - Provision of Services 2
  - Marketing Information 2
  - Regulation 2
  - Policy 2
  - Public Information 2

1992/93 OBJECTIVES/PRIORITIES 3

1992/93 KEY PROJECTS 5

BUDGET 7

ORGANIZATION 9
- Staffing 9

ECONOMIC GEOLOGY SECTION 11
- Mandate 11
  - Coal Unit 12
  - Industrial Minerals Unit 13
  - Mineral Deposits Unit 14

Page

MAPPING AND RESOURCE EVALUATION SECTION 15

DISTRICT GEOLOGY SECTION 17
- Mandate 17

GEOSCIENCE INFORMATION SECTION 21
- Mandate 21
- MINFILE Unit 22
- ARIS - Assessment Report Indexing System 23

ENVIRONMENTAL GEOLOGY SECTION 25
- Mandate 25
- Surficial Geology Unit 26
- Analytical Sciences Laboratory 27
- Applied Geochemistry Unit 28

MINERAL POTENTIAL INITIATIVE 29

SCIENTIFIC REVIEW OFFICE 31

FINANCE AND ADMINISTRATION SECTION 33

TECHNICAL LIAISON COMMITTEE 35

1992-93 GEOLOGICAL SURVEY BRANCH PLAN

PREFACE

This plan is a summary of the Branch's program and what it intends to accomplish in the 1992/93 Fiscal Year. It outlines our mandate, key functions, organization, 1992/93 Action Plans and new initiatives. It should be used in conjunction with the Branch's project inventory, which details all the major projects the Branch will undertake this year. The plan and the inventory are developed by Branch staff to help translate our goals and objectives into measurable, achievable outputs.

MANDATE

Assemble, maintain, and disseminate an up-to-date, comprehensive geoscience database for British Columbia so as to provide a sound base for private sector exploration and development of the province's mineral resources, for resource management decisions by Government, and for public information.

KEY FUNCTIONS

DATA COLLECTION

- Data are collected in two ways. Firstly, by the Branch through its programs of integrated geological and geochemical surveying and secondly, by way of information made available by legislation under the *Mineral Tenure Act* and the *Coal Act*. Results of mapping programs and research are published annually in Geological Fieldwork and other Branch publications. To ensure the economic development projects are targeted to meet the needs of industry and other clients, they are vetted annually by an Industry Technical Liaison Committee.

DATA CURATION AND RETRIEVAL

- Curate and store the confidential and non-confidential geoscience information coming to the Branch so that it can be readily retrieved in an appropriate form by users.
- Maintain a manual Assessment Report library, a manual file on mineral properties, and three computer files - MINFILE, COALFILE, and Regional Geochemical Survey Data (RGS), for rapid retrieval and use by industry and government.

DATA ANALYSIS AND INTERPRETATION

- Synthesize and interpret the variety of data received from prospectors' reports to mining company reports, in the most cost effective way, to provide a quality provincial geoscience database. Publish an annual summary of exploration activity in the volume *Exploration in British Columbia.*
- Provide timely analytical laboratory services and advice in support of Branch survey activities and Ministry programs.
- Assemble and maintain a file on the quality of B.C. coals to promote their use, raw or blended, in new markets.
- Provide interpretative mineral potential maps for integrated resource management.

PROVISION OF SERVICES

- Provide geological services to the public and government from five District Offices (Smithers, Prince George, Kamloops, Nelson, Vancouver) and headquarters in Victoria. Disseminate information through publications, publicly available databases, scientific meetings, trade shows, and an annual open house in Vancouver. Provide prospector training courses throughout the province.

MARKETING INFORMATION

- Market the Branch's geoscience databases and publications in innovative ways to respond to users' needs and to raise revenue.

REGULATION

- Verify company work assessment reports submitted in compliance with the *Mineral Tenure Act* and *Coal Act* within 60 days of receipt. Verification ensures quality data is submitted to province's geoscience database.
- Certify assayers in B.C. as required under the *Ministry Act*. Hold up to two examinations annually.

POLICY

- Improve the effectiveness for evaluation of, and exploration for, mineral, coal and industrial mineral resources through development of integrated, geoscience databases.
- Promote exploration and mine development and attract mineral investment in B.C. Favourable geology and a comprehensive geoscience database are the primary drawing cards to attract private sector mineral exploration investment in an internationally competitive area.
- Provide independent geological information and advice on land use issues; conduct geological surveys and determine mineral potential as required. Provide information on the subsurface for Government departments involved in land administration and integrated resource planning.
- Provide advice on provincial mineral and coal resources, supplies and related technical matters as input to provincial regional economic development initiatives.
- Review, recommend and coordinate geoscience programs to be carried out in British Columbia by the Geological Survey of Canada to ensure Federal programs meet the needs of the province.
- Play a coordinating role on natural hazard research in British Columbia and ensure Government is appraised of the risks.

PUBLIC INFORMATION

- Prepare and disseminate geoscience information targeted at the general public to create a greater awareness of the impact of geology on key issues affecting the everyday life of British Columbians, such as the environment, land and resource use, natural hazards risk and life-style dependence on raw materials.

1992/1993 OBJECTIVES/PRIORITIES

The Branch's geoscience programs in the past have been focused largely on resource development needs. While this continues to be the main thrust of the program, the Branch is responding to the broader needs of Government for geoscience data and information on the Province's mineral potential for sustainable development policies and integrated resource planning.

The 1992/93 program is increasingly concerned with geoscience relevant to land use planning. Future databases will be developed in standard archived and interchange format in compliance with the Government's Corporate Land Information Strategic Plan (CLISP).

- A priority for the Branch in 1992 will be initiation of a new project to revise the obsolete 1:250 000-scale mineral potential maps of the Province. This multi-year project is part of the new inter-Ministry Corporate Resource Inventory Initiative. Its goal is to provide improved, integrated databases on the resources of the Province to meet the escalating demands of land use planning in each region of the Province.

- New multidisciplinary geoscience projects, with economic development emphasis, are planned for the Interior Plateau, North Vancouver Island and the Northern Quesnel Trough under the new Federal Provincial Partnership Agreement on Mineral Development (MDA-2). The Interior Plateau and Quesnel Trough projects are jointly planned with complimentary geophysical and mapping projects by the Geological Survey of Canada.

- A Branch goal is to improve quality management of geoscience projects. Improved timeliness for publication of survey results will be a priority for 92/93. This will involve a survey of clients needs to determine new or revised publication formats. New projects will specify clients who support the project. Publication formats and timeliness will be determined in consultation with clients.

- Effective planning and cooperation with the Geological Survey of Canada continues in 1992 to ensure Federal geoscience programs are targeted to meet Provincial needs, and that there is no duplication of effort.

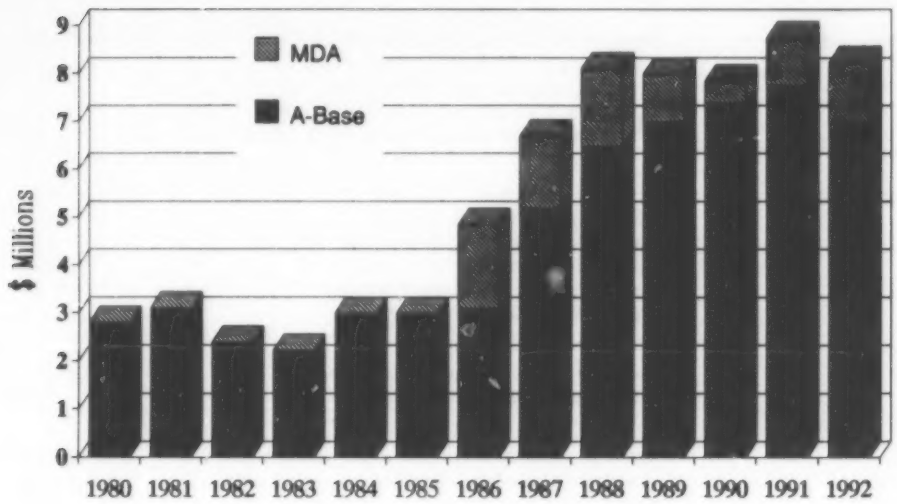
- More efforts will be expended on staff development and employment equity. A number of short courses and field trips are planned for professional staff and general training courses for support and professional staff.

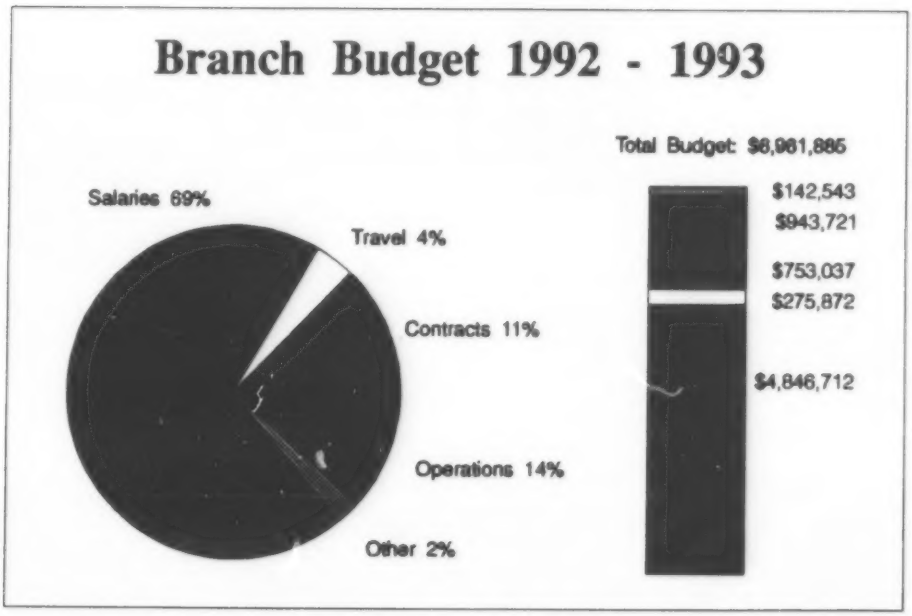
1992/93 KEY PROJECTS

A number of new key initiatives are planned for 1992/93 in addition to ongoing projects identified by each Section in the following pages.

PROJECTS	DESCRIPTION	RESPONSIBILITY
Mineral Potential Initiative	Design and develop a GIS based methodology for producing mineral potential maps for British Columbia and apply it to map production for Vancouver Island and other target areas in the province	All Sections
Geographic Information System	Conduct a pilot test of the new GIS system, utilizing a number of Division databases to demonstrate its usefulness to the Branch in geoscience analysis and to the Division in mineral resource evaluation and management	All Sections
Coal Bed Methane	Evaluate and promote development in B.C. of this potential new resource	Coal Unit
Certification of Assayers Program	Conduct an evaluation of this long standing program to determine its relevance and future role	Analytical Sciences Laboratory
Travel Plan	Develop a plan for effectively meeting the goalsof the Branch and staff in promoting and marketing the Province's exploration opportunities and scientific achievements	All Sections
Human Resources	Develop and implement training plans for all employees and give them the skills and motivation to increase productivity, and to keep abreast of changing technology and science	Managers

Geological Survey Branch Budgets
1980 - 1992





BUDGET

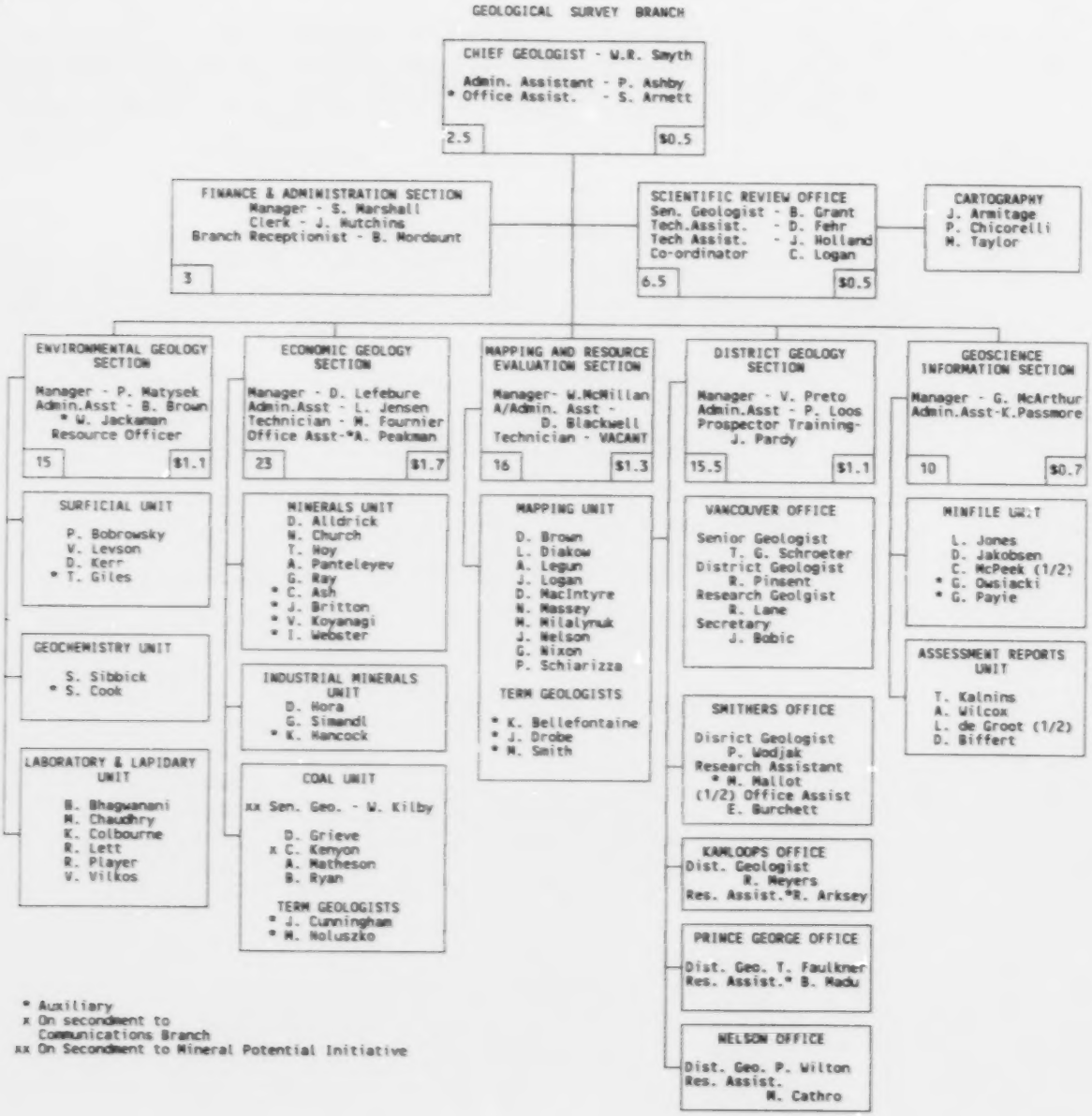
The base budget of the Branch in fiscal year 1992/93 is $6 961 885 million. This is a decrease of $470 000 from 1991/92. The Canada–British Columbia Partnership Agreement on Mineral Development (MDA-2) is expected to be renewed in 1992 and the Branch expects to be allocated $732 000 under this program for geoscience work this year. In addition the Branch expects to be allocated $1 million as part of the Government's new Corporate Resource Inventory Initiatives.

1992/93 GEOLOGICAL SURVEY BRANCH BUDGET

A-BASE BUDGET	
Operational Group	Budget $
Chief Geologist's Office	488,654
Scientific Review	552,866
Mapping and Resource Evaluation	1,295,692
Economic Geology	1,753,327
District Geology	1,073,795
Geoscience Information	720,485
Environmental Geology	1,077,066
Total	6,961,885

MINERAL POTENTIAL INITIATIVE BUDGET	1,000,000

MINERAL DEVELOPMENT AGREEMENT BUDGET	
Interior Plateau Project	344,000
RGS Archives	50,000
Publications	30,000
Northern Vancouver Island Project, Nixon	60,000
Northern Quesnel Trough Project, Ferri	192,000
Total	732,000



* Auxiliary
x On secondment to Communications Branch
xx On Secondment to Mineral Potential Initiative

ORGANIZATION

The Branch is currently organized into six sections; five technical and one administrative.

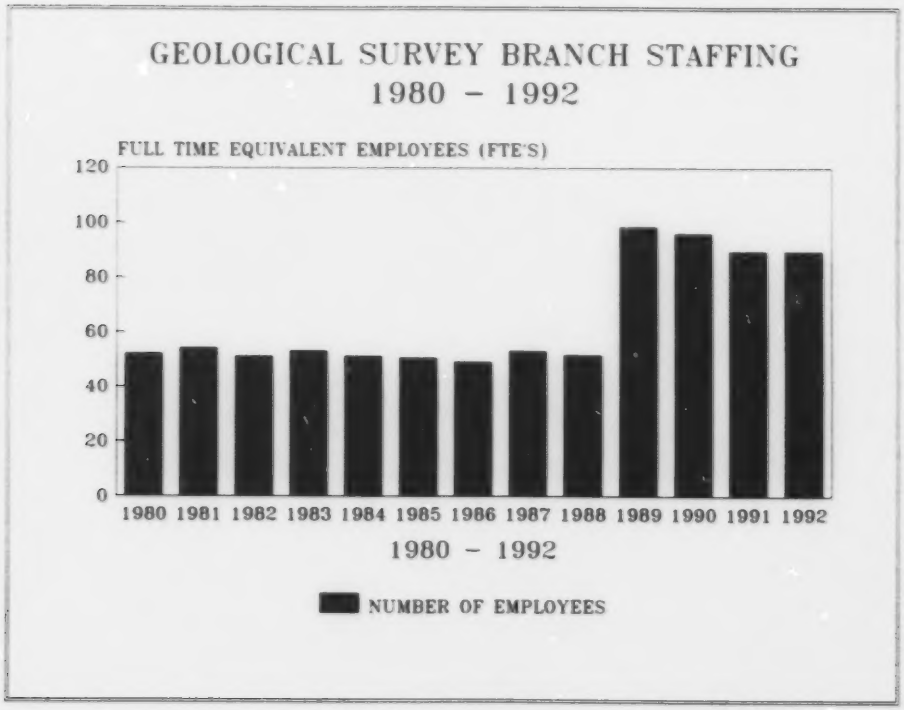
All sections, including the Scientific Review Senior Geologist and Branch Coordinator, report directly to the Chief Geologist.

The Public Information unit created in 1991/92 to create a greater awareness of the importance of geoscience to the everyday life of British Columbians has been disbanded because of budget pressures. However, the Branch will continue its successful programs of prospector training and responsibility for this program has been returned to the District Geology Section in 1992/93. Outreach projects will be the responsibility of all sections and will continue to be an important supporting activity for the Branch.

The objectives, resources, action plans and new initiatives of each of the sections and their various units are defined in detail in this publication.

STAFFING

The Branch has 89.5 FTEs in fiscal year 1992/93. Of the 89.5 FTEs 67 are filled on permanent basis, 22 on term auxiliaries. The term auxiliaries are hired to work on mapping/research projects of predetermined lengths, but usually no more than 4 years. Two new FTEs will be assigned to the Branch to deliver the Mineral Potential Initiative.



ECONOMIC GEOLOGY SECTION

COAL UNIT
INDUSTRIAL MINERALS UNIT
MINERAL DEPOSITS UNIT

STAFFING	22 FTEs
BUDGET	$1,753,327

MANDATE

- Produce databases, maps and reports concerning coal and mineral deposits to assist private sector exploration and government planning and policy making.
- Play a leadership role within the province through talks, visits and consultations.
- Develop modern deposit models and improve our understanding of the economic geology of British Columbia.

COAL UNIT

OBJECTIVES

- To conduct coal deposit and regional geological studies to determine the economic potential of British Columbia's coal and coalbed methane resources.
- To produce and maintain a complete inventory of coal and coalbed methane resources which plays a key role in resource management and aids exploration for new reserves.
- To provide expert advice to the government on all issues related to coal, including the Mine Development Review Process, land use, policy, legislation and coal research.
- To disseminate information about British Columbia's coal and coalbed methane resources to a broad variety of external clients.
- To advance the understanding of coal and its utilization by the public.
- To promote the coal resources of British Columbia.
- To liaise with related geoscience institution to ensure integration of relevant programs and provide advice on Provincial needs and priorities.
- To develop and promote new techniques which improve the production and utilization of British Columbia's coals.
- To maintain and improve COALFILE and inspect, approve and curate assessment reports to ensure the integrity of the government's database.

STAFFING AND RESOURCES

6 FTEs; $479,000

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
FIELD PROJECTS:		
Coal Quality	Grieve/Holuszko	Papers, Fieldwork
Telkwa/Coalbed Methane	Ryan	Open File Maps and Reports
Peace River	Cunningham/Kilby	Papers, Bulletin
Thermal Coalfields	Matheson	Papers, Open File

ACTIVITIES	RESPONSIBILITY	OUTPUT
OFFICE PROJECTS:		
Assessment Reports	Matheson	Assessment Report Approvals
COALFILE	Holuszko	Public access; File data
Mine Development Review Process	All staff	Reports and consultation
Promotion of Development Potential	All staff	Talks and Poster Sessions
Research and Development Advice	Grieve/Ryan	Internal briefing and consultations
Fernie Coalfield Digital Coal Compilation	Grieve	Open File Maps

INDUSTRIAL MINERALS UNIT

OBJECTIVES

- Conduct regional and detailed industrial mineral deposit studies to determine the potential of the province's resources.
- Maintain a complete up-to-date inventory of industrial mineral occurrences.
- Promote industrial mineral development in British Columbia at the provincial, national and international levels.
- Provide timely evaluation of industrial minerals project proposals under review in the Mine Development Review Process and for land use studies.
- Provide information and advice to the exploration and mining industry, manufacturers, commodity traders, government agencies and the public.
- Conduct compilation studies, preliminary market assessments, mineral processing research and value-added studies on industrial minerals.
- Monitor activity by the industrial mineral sector to provide timely advice to government.

STAFFING AND RESOURCES

3 FTEs; $280,219

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
Update Industrial Minerals Map of B.C.	Hora	Open Files
Promotion of Industrial Minerals	Hora	Trade Show Displays, Industrial Minerals
Magnesite deposits, SW B.C.	Simandl	Open File/Papers
FINAL REPORT PREPARATION/PUBLICATION:		
Phosphates	Hora	Bulletins, Papers,
Carbonatites; Kimberlites; Fluorspar	Pell/Hora	Open Files,
Tertiary Basins	Read/Hora	Information Circulars
Limestone and Dolomite	Fischl	
Residual Kaolin, Vancouver Island	Read	Open File

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Industrial Minerals Directory	Hora	Information Circular
Graphite	Simandl	Fieldwork/Exploration in BC
Talc	Hora	Fieldwork
Agricultural Minerals	Hora	Information Circular
Resource Assessments	Hora	Potential Maps Develop B.C. Deposit Models Handbook
International Congress	Hora/McArthur B.C. Trade	Display, Promotion, Brochures, Advertising

MINERAL DEPOSITS UNIT

OBJECTIVES

- Conduct geologic and metallogenic studies of metallic mineral deposits, in order to determine their distribution and mode of formation.
- Develop deposit models to assist the mineral industry in the exploration for new deposits and the government to manage the mineral resources of the province.
- Provide advice to the government on metallic mineral projects in the Mine Development Review Process.
- Contribute information to the provincial mineral occurrence inventory, MINFILE.
- To provide researched/field oriented descriptions of selected mineral deposits (*i.e.* in Exploration Bulletins) - a major part of our past functions.
- Complete regional and provincial metallogenetic studies to assist in the assessment of the mineral potential of the province.

STAFFING AND RESOURCES

13 FTEs; $994,108 (includes Economic Geology Section Management budget)

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
B.C. Skarns	Ray/Webster	Open File, Reports
Transitional/Epithermal Deposits	Panteleyev	Fieldwork, talks
Sullivan Project (joint with GSC and industry)	Höy	Posters, Reports
Promotion of B.C.'s Metallic Mineral Deposits	All Staff	Talks, Courses, Consultations, Conferences, Field Trips
FINAL REPORT PREPARATION:		
Iskut	Alldrick/Britton	Report, Open File Maps
Listwanites	Ash	Report
Rossland	Höy/Andrew	Report

NEW INITIATIVES	RESPONSIBILTY	OUTPUT
Resource Assessments	All staff	Mineral Potential Maps Develop B.C. Deposit Models Handbook
Listwanite - Phase II	Ash	Report, Open File Map

MAPPING AND RESOURCE EVALUATION SECTION

STAFFING	16 FTEs
BUDGET	$1,295,692

OBJECTIVES

- Conduct systematic 1:50 000-scale regional geoscientific surveys of selected, poorly understood or under-explored parts of the province that may have high resource potential.
- Produce maps of this scale as essential precursors to aid mineral explorationists to discover new, employment-generating, world class and smaller mineral deposits to replace today's seriously depleted reserves.
- Use these maps to produce resource potential estimate maps for making informed government decisions. Projects produce mineral potential estimate maps for each area covered in our systematic 1:50 000-scale mapping program.

STAFFING AND RESOURCES

A-Base-16 FTEs; $1.3 million MDA $525 000 CRII $250 000

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
MAPPING PROJECTS:		
Stikine	Brown contractor (Bradford)	Fieldwork reports and Open File maps Cordilleran Round-up
Nation Lakes	Nelson/Bellefontaine	
Iskut North	Logan/Drobe	
Northern Quesnel Trough (MDA)	Contractors (Ferri, Dudka)	
Digital databases, analysis to support MDA and CRII programs, maps	MacIntyre/Grunsky	Maps, Reports, databases, computer networking

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Tatshenshini	Mihalynuk/Smith Schiarizza/MacIntyre	Fieldwork reports and Open File maps, Cordilleran Round-up
Northern Vancouver Island (partly MDA)	Nixon/Hammack	
Tatlow (partly MDA)	Schiarizza/Riddell	
Interior Plateau	Diakow/Green	
Regional Mineral Potential Map team involvement:		
Mineral Potential Methodology Workshop	All Staff	Develop methods and standards
Vancouver Island Mineral Potential Project	Massey	Produce 1:250 000-scale maps

DISTRICT GEOLOGY SECTION

VANCOUVER OFFICE
SMITHERS OFFICE
PRINCE GEORGE OFFICE
KAMLOOPS OFFICE
NELSON OFFICE

STAFFING	13.5 FTEs
BUDGET	$1,073,795

MANDATE

The District Geology Section is responsible for keeping an up-to-date record of mineral exploration and development in the province, responding to issues related to the Mine Development Review Process, Land Use, and Native Land Claims, providing training to prospectors in the Districts and advice and information to the mineral exploration community, other agencies and the general public. These responsibilities are carried out through five District Geologists, and one Senior Regional Geologist based in Vancouver.

OBJECTIVES

- Maintain an up-to-date inventory on the geology, mineral deposits, exploration trends and development in each district.
- Provide a timely response and input to project proposals under review in the Mine Development Review Process, and serve on Mine Review Committees.
- Provide information and advice to various agencies involved in all land use planning processes in the districts.
- Promote the mineral potential of each district.
- Provide advice and information to explorationists, prospectors, other agencies, and the general public.
- Assist in the administration and delivery of the Prospectors Training Program.
- Organize and assist in the delivery of mini-conferences in each district.
- Create and maintain a rock suite display of significant mineral deposits from each district.
- Assist in the evaluation and recommendations of land use studies in each district.

STAFFING AND RESOURCES

13.5 FTEs; $1,073,795

Five District Offices: Smithers, Prince George, Kamloops, Nelson and Vancouver.

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
Prepare an annual Tabulation of Discovery Methods of B.C. Mines	Schroeter	Report
Metallogenic studies in south-central BC: consolidation and synthesis of data; geologic and metallogenic research	Meyers	Reports, talks poster sessions
Metallogenic significance of Tertiary hydrothermal activity in the hangingwall of the Slocan Lake fault	Wilton	Reports
Mineral Deposits and Metallogenic studies, Central District	Faulkner	Report
Revaluate potential of Babine porphyries	Wodjak	Report
Metallogeny and mineral resources appraisal, Southwestern District	Pinsent	Reports, talks, posters

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Metallogenic and property studies, precious and base metals	Schroeter/Lane	Reports
Liaise with new Mineral Deposits Research Unit (UBC)	Schroeter	Internal report
Review of industry response to released geoscience data	Pinsent	Internal report

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Kamloops Exploration Group Fifth Annual Symposium and Exploration Conference April 1992	Meyers	
Compilation of current exploration models and targets in the Purcell anticlinorium, southeast BC	Wilton	Report
Update *Introduction to Prospecting*	Faulkner	Updated publication
North coast massive sulphides	Wodjak	Report
Develop a staffing plan for District offices, that address increased land use activities	Preto	
Develop MINFILE DG system	Preto	Completed system
Prospector Training Courses	Pardy/Preto	Develop course plan and outlines Courses delivered as required
STAFFING	**RESPONSIBILITY**	**OUTPUT**
Staff field offices with full time assistants	Preto	

GEOSCIENCE INFORMATION SECTION

MINFILE UNIT
ARIS UNIT

STAFFING	5 FTEs
BUDGET	$720,485

MANDATE

To provide advice and information on geoscience, exploration, and mineral resources to facilitate investment in the mineral resource sector, land use planning, research and development and to increase public awareness of the importance of B.C.'s mineral resources.

MINFILE UNIT

OBJECTIVES

- Collect, curate and store data, made available by Branch geologists and by legislation under the *Mineral Tenure Act,* for the MINFILE system, a computerized mineral inventory database of over 10 900 mineral, coal and industrial mineral occurrences in BC.
- Incorporate new technology to improve operations efficiency, to develop a system that will improve personal and workgroup productivity and to maintain data integrity.
- Incorporate standards for effective land-information management and data-sharing, which are requirements of the Corporate Land Information Strategic Plan (CLISP) of the Ministry of Environment, Land and Parks.
- Maintain and enhance a stand-alone PC version of MINFILE/pc to search, report and alter the database. To develop a data structure for work history.
- Provide advice and application software to facilitate use of the database.
- Cost-effective distribution of the data, in standard formats, and related maps to industry, government, and university clients.
- Promote technology/software development and transfer through cooperative interagency programs and commercial licensing agreements.

STAFFING AND RESOURCES

5 FTEs; $297,485

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
MINFILE Coding	MINFILE team	Coding, updating and publishing occurrence descriptions
System Development	Jones/McPeek/de Groot	Enhance application software and documentation
Marketing Agreement	Smyth/McArthur/Jones	Sales royalties from other agencies and further project development
Release coded data for 10 1:250 000 map areas	MINFILE Team	Digital files, maps and reports

NEW INITIATIVES	RESPONSIBILITY
Participate in the development of a District Geology database system	Jones/District Geology
To develop a multiuser environment for the MINFILE/pc system	Jones/ISB

ARIS - ASSESSMENT REPORT INDEXING SYSTEM

OBJECTIVES

- Review compliance to Regulations and index approximately 1200 mineral assessment reports annually submitted by the industry to maintain mineral claim tenure under the *Mineral Tenure Act.*
- Develop and maintain a mineral exploration - assessment report database ARIS, which is used as reference in planning new exploration programs, resource management - land use studies, and geoscience research.
- Distribute the ARIS database in paper, microfiche and diskette formats to industry, government, academic and the public.
- Advise clients regarding assessment report administration and ARIS database.
- Advise government regarding policy and legislative proposals.

STAFFING AND RESOURCES

3.5 FTEs; $235,000

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
Assessment Report review administration	Kalnins/Wilcox/Biffert	1200 reports
ARIS database	Kalnins/de Groot	Index, distribution
Revision of Regulations	McArthur/Kalnins	*Mineral Tenure Act* Regulations
NEW INITIATIVES	**RESPONSIBILITY**	
Enhance ARIS database, automate Assessment Report Map updating and production	Wilcox/de Groot	

ENVIRONMENTAL GEOLOGY SECTION

SURFICIAL GEOLOGY UNIT
ANALYTICAL SCIENCES LABORATORY
APPLIED GEOCHEMISTRY UNIT

STAFFING	**11.75**
BUDGET	**$1,077,066**

MANDATE

The Section gathers and interprets geological, geochemical and geophysical data pertaining to the unconsolidated surficial layer mantling much of British Columbia. These studies promote economic development of mineral resources, and provide geoscientific data and analysis of environmental and natural geologic hazards. The Section is also responsible for providing analyses of mineral, rock and ore samples.

SURFICIAL GEOLOGY UNIT

OBJECTIVES

- Provide Quaternary geologic data through field research and analysis and release this information to the government, industry and public for use in mineral exploration, land use assessment, and environmental assessment.
- Provide advice and information to the public, private industry and government on matters of mineral exploration, geological hazards, and other relevant issues related to the surficial geology of the Province on a as need basis.
- Evaluate/demonstrate the capability of drift prospecting techniques in areas of thick overburden.
- Coordinate and develop a provincial geologic hazards database and to contribute to the study and analysis of various geologic hazards related to the surficial environment.
- Provide geologic data to the placer gold mining industry to aid in expanding current reserves and locating new buried deposits.
- Develop, maintain and promote a Quaternary geology database for improving the economic sustainability and land use management of the surficial resources of the province.

STAFFING AND RESOURCES

3.75 FTEs; $298,900

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUTS
Drift prospecting Case studies of selected sites in BC	Kerr/Sibbick	Fieldwork report Open File report
Interpretations of subsurface geology of NE BC	Bobrowsky	Open File External publication
Evaluation of buried placer potential in the Cariboo	Levson	Fieldwork report External publication
Generate public information brochure on geologic hazards	Bobrowsky	Information Circular

ACTIVITIES	RESPONSIBILITY	OUTPUTS
Development of applied surficial geology mapping techniques in populated parts of BC	Levson	Fieldwork report
Interpret the geologic record for earthquakes in BC	Bobrowsky	External publication
Maintenance and development of the Surficial Geology database	Bobrowsky/Giles/ Jackaman	

ANALYTICAL SCIENCES LABORATORY

OBJECTIVES

- Provide timely analyses of rocks, minerals and ores in support of the Ministry's geological and geochemical surveys through in-house and contract services.
- Provide the Ministry with lapidary and photographic services.
- Administer and evaluate the British Columbia Assayers Certification program.
- Produce and publish Open Files using Survey Branch geochemical data.
- Carry out research to improve the sensitivity and production of analytical methods and in support of Branch geoscience programs.
- Carry out research in collaboration with other Ministry Branches to assist the mining industry.
- Provide advice and information on mineral analytical topics to Ministry clients, other agencies and the general public.

STAFFING AND RESOURCES

6 FTEs; $334,327

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUTS
Routine analysis of rocks, minerals, ores and other geological materials	Bhagwanani/Chaudhry Vilkos/Colbourne/Lett	Timely delivery of analytical data to users
Certification of assayers program	Chaudhry/Lett	Complete program evaluation. Hold max two exams and Board meeting
Petrographic Services	Player	Timely delivery of petrographic/ photographic services to uses
Open File publications	Bhagwanani/Chaudry Vilkos/Colbourne/Lett	Complete GSB rock geochemical data open file for NTS 93/ Methods booklet compilation
Q/C data base/new geochemical standards	Bhagwanani/Vilkos Colbourne/Lett	Complete Q/C data base and develop one new standard
ACTIVITIES	**RESPONSIBILITY**	**OUTPUTS**
Improvements to analytical methods	Bhagwanani/Chaudhry Vilkos/Colbourne/Lett	Papers and Open Files from results
Collaborative research	Chaudhry/Lett	Complete acid mine drainage reports/support Resource Management programs

APPLIED GEOCHEMISTRY UNIT

OBJECTIVES

- Provide baseline geochemical data by conducting and releasing Regional Geochemical Surveys of the province for use in mineral exploration, land use assessment, environmental assessment and health studies.
- Provide advice and information to the public, private industry and government on matters of mineral exploration, environmental hazards and health issues relevant to geochemistry.
- Conduct research into sampling, analytical and interpretative techniques which through publications, poster sessions, and oral presentations, promote the use of geochemical methods for mineral exploration and environmental assessment.
- Develop and maintain methods in the processing, interpretation and presentation of geochemical data.
- Establish natural background concentrations of elements and inorganic compounds in rocks sediments and soils; and, document the effects of geochemical and geological variations on these concentrations for use in mineral exploration and environmental assessment.
- Provide data for and assist with the mineral potential assessment of the province.
- Serve on internal and external committees of both scientific and technical nature.

STAFFING AND RESOURCES

2 FTEs; $196,983

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUTS
Regional Geochemical Surveys – 1992 RGS Data Release 92N, Release 92O, 92P Archive Data	Matysek/Jackaman	4 Open File packages in booklet and digital format
Drift Prospecting Case studies of selected sites in BC	Sibbick/Kerr	Fieldwork report Open File
Lake Sediment Studies 93C, 93F, 93K	Sibbick/Cook	Fieldwork report Exploration in BC report
Environmental Geochemistry	Sibbick/Matysek	Fieldwork report
Mineral Potential Studies	Sibbick/Jackaman/Cook	Internal reports
Regional geochemical surveys	Jackaman/Sibbick	3 Open File packages in booklet and digital format

MINERAL POTENTIAL INITIATIVE

STAFFING	4 FTEs
BUDGET	$1,000,000

OBJECTIVES

- Develop mineral potential assessment methodology.
- Conduct and publish mineral potential assessment of the province.
- Develop Geographic Information System procedures and capabilities to facilitate mineral potential and communication of results.
- Provide baseline geochemical data for priority areas by conducting and releasing Regional Geochemical Surveys to aid the mineral potential assessment of region.
- Conduct 1:100 000-scale regional geoscientific surveys in selected, poorly understood parts of the province to facilitate Mineral Potential Assessment.
- Update and enhance MINFILE in selected areas to facilitate Mineral Potential Assessment.

STAFFING AND RESOURCES

4 FTEs (2 seconded from other Sections, 2 new); $1 000 000

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
Mineral potential assessment- Phase I Vancouver Island	Massey/Grunsky/ Kilby	Mineral Potential maps and evaluation report for Vancouver Island 1:250 000
Tatshenshini inventory project	Mihalynuk	Open File maps and reports

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Resource Assessments	Matheson	Resource Potential Maps
Resource Potential Maps	Kilby	Secondment to Resource Potential Initative

SCIENTIFIC REVIEW OFFICE

STAFFING	5 FTEs
BUDGET	$552,866

OBJECTIVES

- Compile, edit and ensure the timely and cost efficient publication of all geoscience data generated by the Geological Survey Branch.
- Expedite the production of approximately 100 publications during the year.
- Promote easier and more convenient access to publications and data from the Geological Survey Branch.
- Coordinate the B.C. Geoscience Research Grant Program and ensure research results are made available to the public and the mining industry.

STAFFING AND RESOURCES

5 FTEs; $494,343

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
PREPARATION AND PUBLICATION OF GSB RESEARCH RESULTS:		
Geological Fieldwork, 1992 Exploration in B.C. 12 Papers 13 Bulletins 30 Information Circulars 4 Geoscience Maps 12 Mineral Potential Maps 20 Open File Maps 15 Open File Reports MINFILE - 10 map sheets and data Regional Geochemistry Survey - 4 map sheets and data 6 Release Notifications Misc. Promotions and Displays and reports	SRO Staff and Authors	Publications and Information available to Government industry and the public
GSB Style Guide	Grant	Information Circular

NEW INITIATIVES	RESPONSIBILITY	OUTPUT
Promote the production of geoscience publications for education and public information	Grant/SRO Staff	Information Circulars
Update the NTS Index to Publications	All Staff	Digital index of GSB published material for B.C.
Produce Microfiche records of publications	Grant/SRO Staff	Microfiche Records of Minister of Mines Annual Reports 1894-1975
Survey of client needs to determine new or revised publication formats	Grant	Recommendations for changes or enhancements to GSB publication products

FINANCE AND ADMINISTRATION SECTION

STAFFING	3 FTEs
BUDGET	$89,211

OBJECTIVES

- Provide guidance, technical direction and training on Finance and Administration issues to staff.
- Develop procedures that streamline Financial and Administrative processes within the Branch.
- Assist Branch Managers in the development and management of Branch budgets.
- Produce meaningful and timely Financial Management Reports.
- Provide assistance and guidance to Branch Managers on various personnel-related issues.
- Provide reception and mail services for the Branch.
- Process all financial documents through Office Management System (OMS).

STAFFING AND RESOURCES

3 FTEs; $89,211

ACTION PLAN

ACTIVITIES	RESPONSIBILITY	OUTPUT
Branch Procedures	Marshall	Finance and Admin. circulars vehicle allocation, safety course, supplies and equipment ordered
Financial Management	Marshall	Test site for new system, evaluate and report

TECHNICAL LIAISON COMMITTEE

The GSB Technical Liaison Committee was established in 1984. Its mandate is to provide ongoing advice to the Minister of Energy, Mines and Petroleum Resources to ensure the geoscience programs of the GSB support the sustainable economic development objectives of British Columbia.

The Committee makes recommendations to the Minister and Ministry executive on adequacy of the program budget, program policy and new programs or initiatives.

The membership of the Technical Advisory committee as of May 1992, was:

CHAIRMAN

Dr. Owen Owens, Vice President of Exploration, Cominco (nominee of the Mining Association of British Columbia).

MEMBERS

Dr. Nick Carter, Consultant (nominee of the British Columbia and the Yukon Chamber of Mines).

Dr. Paul Lhotka, Westmin Mines Ltd. (nominee of the CIMM Geology Division).

Mr. R. S. Hewton, Western Canadian Mining Corp. (nominee of the GAC, Mineral Deposits Division).

Dr. Dick Chase, Dept. of Geological Sciences, The University of B.C.

Dr. Dirk Templeman-Kluit, Geological Survey of Canada.

Dr. Ian Thompson, Pan Orvana Resour[illegible]nc. (nominee of the Association of Exploration Geochemists).

Mr. Don Gunning, President Internationa[illegible]Marble & Stone Co. Ltd. (nominee of the Industrial Minerals Advisory Group).

Dr. W. R. Smyth, Chief Geologist, (Ex-officio).

The Committee met twice with GSB management in 1991/92; November 22, 1991, and March 4, 1992. The Committee plays an active and important role in the Branch's program planning and evaluation cycle. One of its main tasks is to consider and endorse the annual work plan of the Branch.

The Committee met with the Minister, Honourable Anne Edwards on January 22, 1992, and presented their views on the adequacy of the Branch programs and budget to support the economic development objectives of the Province.